FORM PTO-1390 (REV 10-2000) **TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371**	ATTORNEY'S DOCKET NUMBER PTT-121(402544US)
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 09/890596

INTERNATIONAL APPLICATION NO. PCT/EP00/01105	INTERNATIONAL FILING DATE 11 February 2000	PRIORITY DATE CLAIMED 22 February 1999

TITLE OF INVENTION PERSONAL AGENT SYSTEM (as amended)

APPLICANT(S) FOR DO/EO/US VAN ELSAS, Peter Alexander; VOGEL, Heidi; MURNANE, Aisling; ROOS VAN RAADSHOOVEN, Leon Antonius

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.

2. [ ] This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.

3. [ ] This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)).

4. [X] The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).

5. [ ] A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   - a. [ ] is attached hereto (required only if not communicated by the International Bureau).
   - b. [ ] has been communicated by the International Bureau.
   - c. [ ] is not required, as the application was filed in the United States Receiving Office (RO/US).

6. [ ] An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).

7. [ ] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   - a. [ ] are attached hereto (required only if not communicated by the International Bureau).
   - b. [ ] have been communicated by the International Bureau.
   - c. [ ] have not been made; however, the time limit for making such amendments has NOT expired.
   - d. [ ] have not been made and will not be made.

8. [ ] An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).

9. [ ] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).

10. [ ] An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 16 below concern document(s) or information included:

11. [X] An Information Disclosure Statement under 37 CFR 1.97 and 1.98. (with Form PTO/SB/08A&B, Notification of Transmittal of International Search Report, and International Search Report (4 pp.) with copies of Six (6) cited references)

12. [ ] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

13. [X] A FIRST preliminary amendment. (4 pp. including 1 p. of substitute claims)

[ ] A SECOND or SUBSEQUENT preliminary amendment.

14. [ ] A substitute specification.

15. [ ] A change of power of attorney and/or address letter.

16. [X] Other items or information: postcard receipt, application data sheet (2 pp.), Form PTO-1390 (Transmittal Letter to US Designated/Elected Office, 2 pp., in duplicate), cover letter, Copy of PCT Request (7 pp.), PCT Demand (6 pp.), Notification of Receipt of Demand by Competent International Preliminary Examining Authority, International Publication No. WO 00/51040 with one (1) sheet of formal drawing, Notification of Transmittal of International Preliminary Examination Report and International Preliminary Examination Report (16 pp.), including Nine (9) amended sheets, Submission of Priority Document (2 pp.), and Certified Dutch priority document (no. 1011357) with English-language Translation.

U.S. APPLICATION 09/890596	INTERNATIONAL APPLICATION NO. PCT/EP00/01105	ATTORNEY'S DOCKET NUMBER PTT-121(402544US)

17. [X] The following fees are submitted:

BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :

Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO · · · · · · · · $1000.00

International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO · · · · · · $860.00

International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO · · · · · · · · · $710.00

International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) · · · · · · · · · · $690.00

International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) · · · · · · · · · · · · · · $100.00

	CALCULATIONS PTO USE ONLY

ENTER APPROPRIATE BASIC FEE AMOUNT =			$	860.00
Surcharge of $130.00 for furnishing the oath or declaration later than [ ] 20 [ ] 30 months from the earliest claimed priority date (37 CFR 1.492(e)).			$	00.00

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	4 - 20 =	0	X $18.00	$	00.00
Independent claims	1 - 3 =	0	X $80.00	$	00.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ $270.00	$	00.00
TOTAL OF ABOVE CALCULATIONS =				$	860.00
[ ] Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				$	00.00
SUBTOTAL =				$	860.00
Processing fee of $130.00 for furnishing the English translation later than [X] 20 [ ] 30 months from the earliest claimed priority date (37 CFR 1.492(f)).			+	$	00.00
TOTAL NATIONAL FEE =				$	860.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). $40.00 per property			+	$	00.00
TOTAL FEES ENCLOSED =				$	860.00
				Amount to be refunded:	$
				charged:	$

a. [X]   A check in the amount of $ 860.00   to cover the above fees is enclosed.

b. [ ]   Please charge my Deposit Account No. _____ in the amount of $_____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. [X]   The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. __13-3083__. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:
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IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Inventors: **VAN ELSAS, Peter Alexander; VOGEL, Heidi;**
MURNANE, Aisling; ROOS VAN RAADSHOOVEN;
Leon Antonius

International Application No.: **PCT/EP00/01105**

International Filing Date: **11 February 2000**

Priority Claimed: **22 February 1999**

Case: **PTT-121(402544US)**

Title: **PERSONAL AGENT SYSTEM (as amended)**

Commissioner for Patents
Box PCT
Washington, D.C. 20231

S I R:

PRELIMINARY AMENDMENT

        Please amend the above-identified patent
application which is simultaneously filed herewith, as
follows.

IN THE CLAIMS-

To facilitate entry of the following changes, the Applicants
have also submitted herewith a substitute page providing all
the pending claims, as they now stand, incorporating the
changes indicated below.

Re-write claims 1-4 as follows:

-1-

1   --1. (twice amended) Personal agent system within a computer
2   system, characterized[characterised] by a personal agent
3   sub-system [(10)] comprising a plurality of personal agents
4   [(11-14)], each personal agent being arranged to communicate
5   with only one single user: at least one service agent
6   sub-system [(20, 30)], comprising a plurality of service
7   agents [(21-23, 31-34)], each service agent being arranged
8   for carrying out a specific task for the user, and each
9   service agent being connected to one of said personal
10   agents; a co-ordinating sub-system [(40)], comprising one or
11   more co-ordination processors [(41)] for mutual
12   co-ordination of actions of said service agents.

1   2. (twice amended) Personal agent system according to
2   claim 1, characterized[characterised] by a central control
3   unit [(6)] comprising the addresses of said agents [(11-14,
4   21-23, 31-34)] and processors [(41)] and arranged for
5   connecting each user to one personal agent.

1   3. (twice amended) Personal agent system according to
2   claim 1[any of the preceding claims], characterized
3   [characterised] in that a personal agent [(11, 12, 13, 14)]
4   comprises means for adjusting the personal agent [(11, 12,
5   13, 14)] to the behavior[behaviour] of the associated user.

1   4. (twice amended) Personal agent system according to
2   claim 1[any of the preceding claims], characterized
3   [characterised] in that a personal service agent [(21, 22,
4   23, 31,32, 34)] comprises means for adjusting the personal
5   service agent [(21, 22, 23, 31, 32, 34)] to the behavior
6   [behaviour] of the associated user. --.

REMARKS

The foregoing amendment is made to conform the claims in the application to that amended in the International Preliminary Examination Report, to correct minor typographical and grammatical errors, and to eliminate multiple dependent claims.

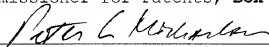Respectfully submitted,

02 August 2001

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EXPRESS MAIL CERTIFICATION

"Express Mail" mailing label number: **EL632363056US**
Date of deposit: **03 August 2001**

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, **Box PCT**, Washington, D.C. 20231.

Signature of person making certification

Peter L. Michaelson
Name of person making certification

(p121amd/ks/74)

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1.   Personal agent system within a computer system,
characterized by a personal agent sub-system comprising a
plurality of personal agents, each personal agent being
arranged to communicate with only one single user: at least
one service agent sub-system, comprising a plurality of
service agents, each service agent being arranged for
carrying out a specific task for the user, and each service
agent being connected to one of said personal agents; a
co-ordinating sub-system, comprising one or more
co-ordination processors for mutual co-ordination of
actions of said service agents.

2.   Personal agent system according to claim 1,
characterized by a central control unit comprising the
addresses of said agents and processors and arranged for
connecting each user to one personal agent.

3.   Personal agent system according to claim 1,
characterized in that a personal agent comprises means for
adjusting the personal agent to the behavior of the
associated user.

4.   Personal agent system according to claim 1,
characterized in that a personal service agent comprises
means for adjusting the personal service agent to the
behavior of the associated user.

Personal agent system.

The invention relates to a personal agent system within a computer system.

In addition, the invention relates to a method for providing a personal agent
5   system within a computer system.

Such systems and methods are generally known. An example thereof is
Microsoft's Firefly system. In said system, a user may have an agent - arranged as a
computer program within a computer network - carry out an order to compose a list
having musical compact discs which are interesting to the user. The agent is arranged
10   to carry out said task autonomously, the agent being capable of shifting within the
computer network and making contact with other agents who are active within the
system. From the contact with other agents, inter alia, the agent may obtain information
to complete his task.

WO9625012 discloses an information service provision system for making services
15   available by means of one or more communication networks. The system makes use of
intelligent software agents in a distributed processing environment (DPE). The agents co-
operate to provide access for system users to the services. The agents are reconfigurable
to modify functionality of the system available to the user: the agent reconfigures itself in
response to a user input to the system, and modifies said functionallity accordingly. The
20   goal of the prior-art disclosure is advanced multimedia transmission over
telecommunication networks, to be controlled by users, via said reconfigurable agents,
executing the user's commands.

The goal of our invention, on the contrary, is to lower the heavy burden of computer
networks, caused by conventional "stand alone" agents used in state-of-the-art agent
25   systems, each of said agents being rather extensive and complex computer programs,
required to be able to carry out their task, to move through the computer network and to
make contact with other agents all of those agents maintaining an extensive mutual
communication.

Moreover, due to the independency of all those individual ("stand alone") agents, it is
30   hardly feasible to control all contacts made by those agents with third parties. A
supplementary goal of the invention is to provide a system with advanced control of all
software agents. To this end, the system according to the invention comprises a personal

WO9625012 discloses an information service provision system for making services available by means of one or more communication networks. The system makes use of intelligent software agents in a distributed processing environment (DPE). The agents co-operate to provide access for system users to the services. The agents are reconfigurable

5   to modify functionality of the system available to the user: the agent reconfigures itself in response to a user input to the system, and modifies said functionality accordingly. The goal of the prior-art disclosure is advanced multimedia transmission over telecommunication networks, to be controlled by users, via said reconfigurable agents, executing the user's commands.

10   The goal of our invention, on the contrary, is to lower the heavy burden of computer networks, caused by conventional "stand alone" agents used in state-of-the-art agent systems, each of said agents being rather extensive and complex computer programs, required to be able to carry out their task, to move through the computer network and to make contact with other agents all of those agents maintaining an extensive mutual

15   communication.

Moreover, due to the independency of all those individual ("stand alone") agents, it is hardly feasible to control all contacts made by those agents with third parties. A supplementary goal of the invention is to provide a system with advanced control of all software agents. To this end, the system according to the invention comprises a personal

20   agent sub-system comprising a plurality of personal agents, each personal agent being arranged to communicate with only one single user. Moreover the system according to the invention comprises at least one service agent sub-system, comprising a plurality of service agents, each service agent being arranged for carrying out a specific task for the user, and each service agent being connected to one of said personal agents. Finally, the

25   system according to the invention comprises a processing sub-system, comprising at least one processor for processing data of said service agents.

Simply said, the invention provides for a regular and efficient architecture offering a much better controllability of the agents. Each user only communicates directly with his/her personal agent, which subsequently passes on orders from the user to the relevant

30   service agent and vice versa. In addition, problems regarding unreliable third parties are avoided since the personal agent and the (personal) service agents of a user exclusively operate for their own user. Since interaction with agents of third parties does not take

AMENDED SHEET

place directly, but by way of a neutral processor, it is avoided that confidential
information is inadvertently exchanged.

By self-learning agents with respect to the user behaviour, preferences etc. the
interactions with the user are minimized, resulting in a reduction of system load.

5   Moreover, an additional effect is that the quality of the service to the user will increase in
course of time.

The invention will be further clarified in the following description of an
exemplary embodiment of the invention, with reference to the drawing enclosed.

The single figure schematically shows an example of a system according to the

10   invention.

The figure shows a personal agent system 1 according to the invention. System
1 is provided with a receptor section 2 for setting up a communicative connection with
users, a central control unit 6 for distributing information flows, and an environment 10
of personal agents, two environments 20, 30 having personal service agents, and an

15   environment 40 for processing parts.

The personal agent environment 10 of the system 1 in this example is provided
with four personal agents 11, 12, 13 and 14. Each personal agent is allotted to a single
user who may set up a connection exclusively with his own personal agent.

For a user, his own personal agent is the only means by which he may utilise the

20   system 1. The personal agents are therefore arranged to communicate with their own
user, e.g., to receive orders or to pass on information obtained to the user. In addition,
the personal agent is arranged for communication with personal service agents to be
discussed below, e.g., for passing on orders to, or receiving results from, the personal
service agents.

25   In this example, there are two personal service-agent environments present,
arranged as a secretary environment 20 having personal secretary agents in the form of
secretaries 21, 22, 23 and, as a personal travelling-agent environment having travelling
agents 31, 32 and 34. Personal service agents, such as the travelling agents and
secretaries referred to above, operate exclusively for a single user. To achieve this, the

30   personal service agents are connected to the personal agent of their own user. Having
said this, the invention is not limited to application with two service-agent
environments; any number of service-agent environments may be chosen.

AMENDED SHEET

The processing-part environment 40 is provided with a processing part in the form of an appointment maker 41. Said appointment maker 41 is arranged for processing, based on data as supplied by a service agent such as, e.g., a secretary and, if necessary, making contact with other service agents. In this connection, the data of the

5   service agents is treated confidentially. The appointment maker 41 is referred to by way of example of a processing part, and the invention is also applicable with other processing parts.

A user is always provided with a personal agent, since the communication with the personal agent system takes place by way of the personal agent. In addition, each

10   user is provided with at least a personal service agent, but the user does have the choice of the service agent he prefers to use. Since the user chooses the functions required by him, there occur no unused elements in the system. As a result, the system is kept as small as possible, and therefore operates efficiently.

The personal agent 11 disposes of two personal service agents, i.e., a secretary

15   21 and a travelling agent 31. The secretary 21 is implemented in the form of an independently operating program which is especially arranged for carrying out specific tasks, in this case carrying out secretarial tasks such as, e.g., managing the agenda of the user and making appointments with third parties. The travelling agent 31 is also implemented in the form of an independently operating program which is especially

20   arranged for carrying out specific tasks, in this case, by way of example, planning a travelling schedule.

Since the user is permitted to choose which tasks he wants to have the personal agent system carry out, not all possible service agents need be allotted to a personal agent. Thus, the personal agent 13 is only provided with a secretary 23, and the

25   personal agent 14 is only provided with a travelling agent 34.

Because in the system according to the invention, the agents and agents are capable only of communicating with predetermined parties according to fixed rules, therewith determining a social hierarchy, the reliability of the system is guaranteed. Because the hierarchy also prevents unnecessary communication, the burden on the

30   system is reduced. Therewith, a personal agent system is obtained which is reliable, purposeful and efficient to users.

System 1 is implemented in the form of a computer system, including a computer network. The environments 10, 20, 30 and 40 may each wholly or partly consist of physical and logical environments. In this connection, a physical environment is determined by a single computer, and a logical environment may comprise several computers, the boundaries of the environment being determined by participants' data, such as, e.g., an address list which may be stored in, e.g., the central control unit 6.

The communication takes place by way of communicative connections comprising all options for transferring data, both unidirectional and bidirectional connections, as well as permanent and temporary connections. In particular, there is deemed to be included exchange of data within networks, such as intranet, Internet, and the protocols required for the exchange of data within a computer network, and in particular relating to agent software.

In this embodiment, system 1 is arranged, by way of example, for four users. The invention may, however, be applied to other numbers of users. In this example, the users may make contact, by way of a personal computer 60, with a modem by way of a telephone line, with the receptor section 2. By way of a user interface of the personal computer 60, the users may pass on information to, and receive it from, system 1. The way of interaction, which is referred to here, of the user with the system 1 by way of the receptor section 2, is referred to here exclusively by way of example; the invention is also applicable with other ways of communication capable of being applied between a user and a computer system. Such ways are known, so that for briefness' sake there is refrained from a detailed description.

The personal agents 11, 12, 13 and 14, as well as the service agents 21, 22, 23, 31, 32 and 34 are implemented as independently operating programs such as, e.g., an agent. Such programs are generally known, so that for briefness' sake there is refrained from a detailed description.

In operation, a first user makes contact, by way of a personal computer 60, with the receptor section 2 of the system 1. The receptor section 2 provides a communication channel to the central control unit 6 which, based on the identity of the first user, locates its associated personal agent 11, and sets up a connection. In this example, the central control unit 6 is implemented with an address book with location

data of all parts of the system 1. The various parts of the system are capable of obtaining, at the central control unit 6, the data required for making contact with another part. Based on the data present within the central control unit 6, it may decide whether or not to provide information to a part in question; as a result, the central

5   control unit 6 protects the hierarchy within system 1. Therewith, it is also achieved that confidential data is not supplied to unreliable parties.

An example of a service to be rendered by the personal agent system according to the invention is making appointments.

A first user then passes on to his agent 11 that he wants to make an appointment

10 with, e.g., a second and a third user on a point in time X and a location Z.

The agent 11 passes on the information relating to the appointment to the secretary 21, who is also associated with the first user. The secretary 21 analyses the information and makes contact with a processing unit 41 operating as an appointment maker, with the instruction of making an appointment for the first, second and third

15 users at the point in time between X and Y and location Z. The appointment maker 41 then makes contact with the secretaries 22 and 23 of the second and third users, respectively. Said secretaries 22 and 23 check whether the appointment in question is permitted to take place, based on the agenda of their user. Both secretaries 22 and 23 pass on their wishes relating to the time and place to the appointment maker 41, who

20 subsequently, based on the wishes of all secretaries involved, determines the optimum appointment. In this connection, the location and time offering the best solution for all users are sought. For all those involved, the most acceptable point in time proves to be X' and for the location Z'. Having said this, in another modification of the embodiment processing parts may also be subject to other criteria in processing data from service

25 agents. In the present example, the wishes of a specific user might prevail over those of other users, e.g., since said user is available only at, e.g., a specific number of points in time, or is bound to a specific location.

The appointment maker 41 passes on the information on the appointment determined by him on point in time X' and location Z' to the secretaries 21, 22 and 23,

30 who note the appointment in the agenda of the user in question and notify the associated agent 11, 12 and 13 of the appointment. When their user makes contact again, the agents 11, 12 and 13 will notify the user of the appointment.

The agent 11, which has been notified of the information of the appointment in the meantime, now notifies the travelling agent 31 associated with it of the appointment with the instruction of drawing up a travelling schedule with which the user will arrive at the appointed location at the appointed time. The travelling agent 31 then draws up the required travelling schedule and passes it on to the agent 11, who will pass on said schedule at a next contact with the user. In a modification of the embodiment of the invention, the personal service agents of a user may directly exchange specified information, apart from the option referred to above of exchanging information by way of the personal agent. In this connection, the service agents must be aware of each other's existence and options. A secretary of the travelling agent of a user might hear, e.g., what the travelling time between two locations amounts to, in order to be capable, e.g., of better managing the agenda of the user in this way. Since both agents operate exclusively for the same user, problems relating to confidential data are avoided. Due to said direct communication between the service agents, the burden on the system is reduced.

Although in this example there was assumed a central control unit 6, provided with an address book for regulating the social hierarchy within the system, other embodiments of such a control system are also applicable, such as, e.g., identification of agents by way of a password or key. There may also be applied a bulletin-board system.

In a modification of the embodiment of the invention, the personal agents are provided with a self-learning module which is arranged to learn from the interaction with the user and to adjust the behaviour of the agents thereto. Such modules are formed by a computer program and are generally known. Since the personal agent is capable of adjusting itself to the wishes of the user, the user receives a better service rendered by the personal agents and, in doing so, the amount of communication is reduced, which further decreases the burden on the system.

In another modification of the embodiment of the invention, the personal service agents are additionally provided with such a self-learning module, so that the service agents, too, achieve the advantages referred to above. In addition, it is possible here to have the personal agent exchange learning information with the service agent in question in order thus to accelerate the learning process.

In a further modification of the embodiment, it is possible that the self-learning modules of personal agents within an agent environment exchange learning information in order thus to learn from other personal agents. This may take place, e.g., by having the programs which constitute the agents communicate among themselves. For this purpose, the user must expressly give his permission to his personal agent in advance, and in this connection indicate that the agent is permitted to gain contact with agents of third parties and indicate which personal information the agent may liberate to third parties. Furthermore, it is possible to indicate with which agents the agent of the user is permitted to communicate. Through this selective communication, it is prevented that confidential information of the user be inadvertently passed on, as a result of which the trust of the user in the agent will increase. In this connection, the data traffic between the agents is limited to the required amount, so that the system is not unnecessarily burdened. Such an exchange of learning information is also possible within an environment of service agents in the way described above.

The implementation of the invention in a computer system may take place in various ways; the embodiment referred to in the example must be considered as being non-limitative. The program parts for the implementation of the elements of the invention may be distributed over a computer network, a program part, e.g., being distributed over several computers, or various parts being present in one and the same computer, or several parts of the same program utilising, e.g., multi-threading.

In an exemplary embodiment of the invention, a personal agent may be formed for a new user at the first instance of use of the personal agent system. This may be effected, e.g., by making a copy of a generic personal agent program, and then personalising said copy by, e.g., adding personal data of the user to the program. In the same way, the user may initiate the personal service agents desired by him. The agent with associated agents created in this manner may then, e.g., be added to the central control unit and thereby be ratified.

CLAIMS

1. Personal agent system within a computer system, characterised by
a personal agent sub-system (10) comprising a plurality of personal agents (11-14),
each personal agent being arranged to communicate with only one single user;
at least one service agent sub-system (20,30), comprising a plurality of service agents
(21-23, 31-34), each service agent being arranged for carrying out a specific task for the
user, and each service agent being connected to one of said personal agents;
a co-ordinating sub-system (40), comprising one or more co-ordination processors (41)
for mutual co-ordination of actions of said service agents.

2. Personal agent system according to claim 1, characterised by a central control
unit (6) comprising the addresses of said agents (11-14, 21-23, 31-34) and processors
(41) and arranged for connecting each user to one personal agent..

3. Personal agent system according to any of the preceding claims, characterised in
that a personal agent (11, 12, 13, 14) comprises means for adjusting the personal agent
(11, 12, 13, 14) to the behaviour of the associated user.

4. Personal agent system according to any of the preceding claims, characterised in
that a personal service agent (21, 22, 23, 31, 32, 34) comprises means for adjusting the
personal service agent (21, 22, 23, 31, 32, 34) to the behaviour of the associated user.
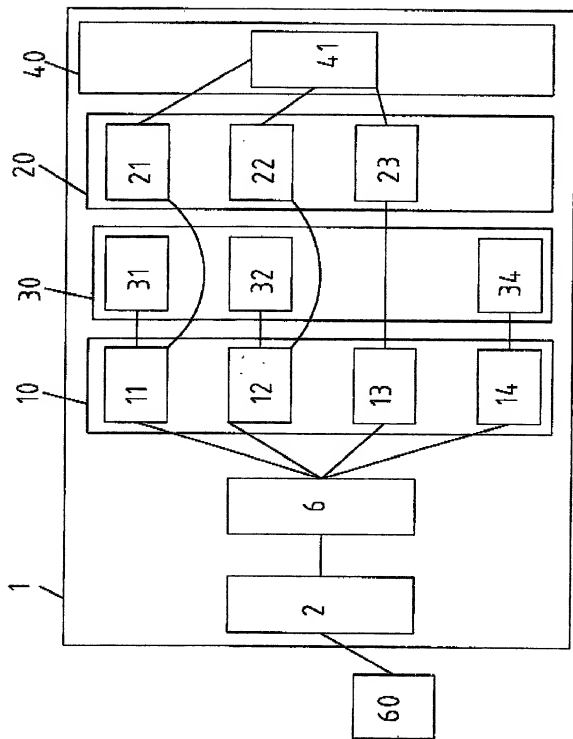
DECLARATION AND
POWER OF ATTORNEY
(Utility Patent Application)

As a below named inventor, I hereby declare:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below), of the subject matter which is claimed and for which a patent is sought on the invention entitled:

"Personal-assistant system"

 the specification of which:

___ is attached hereto
___ was filed on _____ as Application Serial
       No. _____ with amendment(s) filed _____
_X_ was filed as PCT international application: PCT/EP00/01105
      and was amended under PCT Article 19

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations section 1.56.

I hereby claim foreign priority benefits under Section 119 of Title 35, United States Code for the above-identified US patent or inventor's certificate identified below and having a filing date before that of the US patent application for which priority is claimed:

			Priority Claimed
Application No	Country	Filing Date	under 35 USC 119
1011357	NL	February 22, 1999	YES

I hereby claim the benefit under Section 120 and/or Section 119(e) of Title 35 of the United States Code of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by Section 112 of Title 35 of the United States Code, I acknowledge the duty to disclose material information, as defined in Section 1.56 of Title 37 of the Code of Federal Regulations, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

			Status	
Application Serial No.	Filing Date	Patented	Pending	Abandoned

NONE

Power of attorney:

-1-

As a named inventor, I hereby appoint:

> Peter L. Michaelson (Reg. No. 30,090)
> Robert M. Wallace (Reg. No. 29,119)
> Jeremiah G. Murray (Reg. No. 20,533)
> John T. Peoples (Reg. No. 28,250)
> Ronald L. Drumheller (Reg. No. 25,674)
> Edward M. Fink (Reg. No. 19,640)
> Christopher Balzan (Reg. No. 40,901)
> Eric Agaard (Reg. No. 40,478)

as my attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office in connection therewith.

Direct all correspondence to Customer Number 007265 at the following address:

> MICHAELSON & WALLACE
> Parkway 109 Office Center
> 328 Newman Springs Road
> P.O. Box 8489
> Red Bank, New Jersey 07701.

Direct all telephone calls to: (732) 530-6671.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Date: 21 aug   , 2001

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Citizenship: The Netherlands
             Country

Signature: _____

Date: ____17_-_09_-_2001__
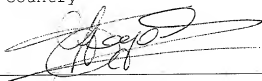
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Signature: _____

Date: _28-01_ / _ 2002

Third inventor:

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Date: _12 Sep, 2001____

Fourth inventor:

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Signature: _____

Date: _____ 21 aug 2001

-6-

DECLARATION AND
POWER OF ATTORNEY
(Utility Patent Application)

As a below named inventor, I hereby declare:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below), of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PERSONAL AGENT SYSTEM (as amended)

the specification of which:

___ is attached hereto
_X_ was filed on 03 Aug. 2001 as Application Serial
    No. 09/890,596   with amendment(s) filed 27 April 2001
_X_ was filed as PCT international application: PCT/EP00/01105
    and was amended under PCT Article 19

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations section 1.56.

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                                              Status

Application Serial No.	Filing Date	Patented	Pending	Abandoned

NONE

Power of attorney:

As a named inventor, I hereby appoint:

Peter L. Michaelson (Reg. No. 30,090)
Robert M. Wallace (Reg. No. 29,119)
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